

Amendment to the Specification

Please amend the paragraph commencing at line 25 of page 9 with the following amended paragraph, where the deletion required at line 29 is indicated by a strike-through:

FIG. 1 shows an earth-grading machine 1 according to an aspect of the present invention, including a dual laser elevation machine control system 10 used to establish grade and to maintain elevation control for a contouring blade 2 mounted to the machine 1. While shown in its present configuration for use with construction earth-grading machinery 1, control system 10 can also be used ~~on~~ with agricultural equipment as well. The control system 10 includes detectors 20 that are mounted to the machine 1 through optional masts 30. It will be understood that subsequent discussion of detectors and their corresponding masts in the general sense will include reference numbers 20 and 30, respectively, and that the references to a left and right detector 20L, 20R and a left and right mast 30L, 30R are made manifest from the drawing. Masts 30L, 30R, which may include telescoping features 70, can be either manually, hydraulically or electrically adjusted, the latter two cooperative with a motor to facilitate automated translational movement of the mast along the vertical axis relative to earth-grading machine 1. Laser transmitter 40 generates a beam 50 that may be swept to define a reference plane, normally several feet above the ground. Detectors 20, essentially 360° omni-directional, detect the laser beam 50 and send elevation information to the controller 60, which is mounted in the cab of earth-grading machine 1. It will be appreciated that some of the functions of controller 60 can be distributed among other components in system 10. For example, system 10 may include a network (not shown) over which laser signals and their deviations can be broadcast, thereby freeing up the controller 60 to dedicate more of its function to passive elevation and status display. Likewise, it will be understood that the essential functions of controller 60 are preserved, regardless of whether it is configured as a distributed or centralized system. In the present configuration, controller 60 is used by the operator as the interface to provide information relating to setup, operation and positioning of the earth-grading machine 1. Detector 20, in conjunction with controller 60, determines the position of the blade 2 relative to the reference plane established by transmitter 40, indicating for example how much the reference plane is

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above or below the detector **20** location on the masts **30**. Actuators **3** on the earth-grading machinery are used to position the blade **2** in response to an operator command or a signal from the controller **60** such that the earth-grading machine **1** can work on ground **4**.